

REMARKS

The present invention relates to a float textile having an improved optical interference function.

In the Office Action dated September 30, 2002, the Abstract of the Disclosure was objected because it was more than one paragraph in length. The sole grounds for rejection was alleged anticipation of claims 1-8 under 35 U.S.C. § 102(b) based on WO 98/46815, with corresponding U.S. patent 6,430,348 to Asano et al being referenced and portions thereof specifically cited for the proposition that Asano et al discloses an optical interference functional fiber which **may** be formed into the claimed textiles (emphasis added). It was asserted that the fabric of Asano et al has the claimed L value, float texture, float ratio, and flattening ratio, and it was further asserted that the fabric may be formed into car and room interiors.

In response to the Office Action, first, Applicants have herein replaced the original Abstract of the Disclosure with a new Abstract of the Disclosure, in which the abstract is set forth as a single paragraph, in compliance with MPEP § 608.01(b).

With respect to the prior art rejection based on Asano et al, Applicants respectfully traverse. Referring to independent claim 1 of the present application, it is seen that the float textile of the present invention has several features of significance, as follows:

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appl. No.: 09/842,197

(a) Its float texture is formed from multi-filament yarns each comprising, as a constituent unit, optically interfering mono-filaments which are formed by alternately laminating layers of at least two polymers having different refractive indices, and which have a flattening ratio of 4 to 15.

(b) The float texture of the textile is formed by combining the above three or more multi-filament yarns and interlacing the multi-filament yarns to form **20 or less** interlaces per meter.

(c) In the float texture, the above noted multi-filament yarns are used as a warp float and/or as a weft float component.

(d) The float number is 2 or more.

The combination of the above characteristics results in the float textile of the present invention having a bright cover development effect.

One important feature that provides for sufficient color development effect is that the number of interlaces of the multi-filament is 20 or less per meter, as indicated in feature (b) above. This characteristic of 20 or less interlaces of the multifilaments means that the axial twisting of flat filaments is substantially null or very rare. Since the flat filaments are no more than rarely axially twisted, a bright color is developed.

The foregoing can be understood from a comparison of invention Example 1 and Comparative Example 3 (see pages 16-17 and Table 1 of the present application).

In Example 1 and Comparative Example 3, optically interfering yarns of 360 Dtex is used and the number of interlacing fibers is 3. However, the number of interlaces is 30 in the case of Comparative Example 3, and 15 in the case of Example 1.

The optical interference effects of a float textile are a slight gloss color change and slight color development in the case of Comparative Example 3, versus sufficient gloss, color change, and color development in inventive Example 1. This is seen to be attributable to the difference in the number of interlaces (see Table 1 (continued) on page 17).

Further reviewing the Asano et al reference, it is seen that Asano et al describes an optically interfering mono-filament having a flattening ration of 4 to 15, and indicates that such filament can be used in float textile. However, Asano et al fails to teach how multi-filament yarn is produced from optically interfering mono-filaments, and how a float textile having sufficient gloss, color change, and color development can be obtained from Asano et al's multi-filament yarn. Particularly, the Asano et al reference fails to teach or recognize the role of reducing the axial twisting of the optically interfering mono-filaments having a flat cross-section,

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No.: 09/842,197

nor how much the number of interlaces must be reduced to obtain the desired properties that are found in the cases of the present invention.

In summary, the Asano et al reference fails to teach or suggest that a float textile having the above-noted features (b), (c), and (d) could be formed from the mono-filaments having the feature (a) that is disclosed in Asano et al. There is no basis in Asano et al for recognizing that a float textile having sufficient gloss, color change, and color development would result from the required features (b), (c), and (d) of the presently claimed invention.

Accordingly, it is respectfully submitted that the presently claimed invention is unanticipated, and is patentable over the Asano et al reference.

Therefore, the allowance of claims 1-8 is respectfully submitted to be proper.

Early favorable action is earnestly solicited.

In the event that the Examiner believes that it may facilitate the further prosecution of this application, the Examiner is invited to contact the undersigned attorney at the local Washington, D.C. telephone number indicated below.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No.: 09/842,197

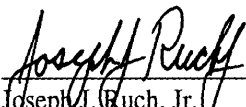
The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860



PATENT TRADEMARK OFFICE



Joseph J. Ruch, Jr.
Registration No. 26,577

Date: December 30, 2002

APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE ABSTRACT OF DISCLOSURE:

The original Abstract of the Disclosure is deleted, and is replaced by the Abstract of the Disclosure below:

Abstract of the Disclosure

A float textile having an improved optical interference function, containing a float texture yarn formed by combining three or more multi-filament yarns each comprising, as a constituent unit, optically interfering mono-filaments which are formed by alternately laminating layers of at least two polymers having different refractive indices and which have flattening ratio of 4 to 15 and by interlacing the multi-filament yarns to form 20 or less interlaces per meter, used as a warp float and/or weft float component, and having a float number of 2 or more. A spun-dyed textile which is formed by combining a large number of optically interfering multi-filament yarns can provide a float textile which can exhibit a bright color development effect and can expand the utility thereof to room interior and car interior fields.